

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Currently amended) A dispersible dry powder for pulmonary delivery
2 ~~consisting essentially of~~ comprising a therapeutically effective amount of a therapeutic agent
3 ~~dispersed throughout in~~ aerogel particles ~~which are soluble in human pulmonary surfactant~~
4 wherein said particles have a density and particle size to permit them to reach the
5 alveoli of a human subject's lungs upon inhalation.

1 2-16. (canceled)

1 17. (new) The powder of claim 1 wherein said particles deliver said agent
2 into the bloodstream of said subject.

1 18. (New) The powder of claim 1, wherein the aerogel particle is prepared
2 from an aerogel prepared by supercritical drying at a temperature of less than 40°C.

1 19. (New) The powder of claim 1, wherein the aerogel particle contains pores
2 of about 1 to 100 nm.

1 20. (New) The powder of claim 1, wherein the aerogel particle has a surface
2 area of about 100 to 1,200 m²/g.

1 21. (New) The powder of claim 1, wherein the aerogel particle has a density
2 of about 0.1 to 0.001 g/cc.

1 22. (New) The powder of claim 1, wherein the aerogel particle has a particle
2 size of about submicron up to about 3 microns.

1 23. (New) The powder of claim 1, wherein the aerogel particle is a carrier
2 selected from the group consisting of sugars and carbohydrates.

1 24. (New) The powder of claim 1, prepared by co-gelling the therapeutic
2 agent with a gel-forming material selected from the group consisting of sugars and
3 carbohydrates.

1 25. (New) The powder of claim 1, prepared by the steps of (i) preparing
2 porous gels of a carrier material which is soluble in pulmonary surfactant; (ii) soaking the porous
3 gels in a solution of the therapeutic agent; (iii) removing the solvent and forming aerogels by
4 supercritical drying; and (iv) converting the aerogels into powder.

1 26. (New) The powder of claim 1, wherein the therapeutic agent is insulin.

1 27. (New) The powder of claim 1, wherein the therapeutic agent is
2 methadone.

1 28. (New) The powder of claim 1, wherein the therapeutic agent is
2 naltrexone.

1 29. (New) A method of treating a disease state responsive to treatment by a
2 therapeutic agent comprising pulmonarily administering to a subject in need thereof a dispersible
3 dry powder according to claim 1.

1 30. (New) The method of claim 29, wherein the powder is prepared from an
2 aerogel prepared by supercritical drying at a temperature of less than 40°C.

1 31. (New) The method of claim 30, wherein the powder is prepared from an
2 aerogel prepared by co-gelling the therapeutic agent with a gel-forming material selected from
3 the group consisting of sugars and carbohydrates.

1 32. (New) A method of preparing a dry powder according to claim 1, said
2 method comprising converting an aerogel comprising said therapeutic agent into particles having
3 a particle size permitting them to reach the alveoli of a subject's lungs upon inhalation.

1 33. (New) A composition comprising the powder of claim 1.

1 34. (New) The composition of claim 33 further comprising a dispersant.

1 35. (New) The composition of claim 34 wherein said dispersant is a
2 chlorofluoro compound.

1 36. (New) A method of delivering a therapeutic agent to a subject, said
2 method comprising administering to said subject a dispersible dry powder according to claim 1
3 as an inhalant.

1 37. (New) A method of delivering a therapeutic agent to the bloodstream of a
2 subject, said method comprising administering to said subject a dispersible dry powder according
3 to claim 1 as an inhalant.

1 38. (New) A method of delivering a therapeutic agent to a subject, said
2 method comprising administering to said subject a composition according to claim 33 as an
3 inhalant.

1 39. (New) The powder of claim 1 wherein said agent is adsorbed onto the
2 structure of said particles.

1 40. (New) The powder of claim 1 wherein said particles are directly prepared
2 from said therapeutic agent.

1 41. (New) The powder of claim 1 wherein the structure of said particles
2 comprise said therapeutic agent.

1 42. (New) The powder of claim 1 wherein said powder is formulated for
2 quick introduction into the bloodstream and controlled release thereafter.

1 43. (New) The powder of claim 1 wherein the powder is formulated for slow
2 release.

44. (New) A dispersible dry powder for pulmonary delivery comprising a therapeutically effective amount of a therapeutic agent and aerogel particles

wherein said particles have a density and particle size to permit them to reach the alveoli of a human subject's lungs upon inhalation.